






Monomer containing electron-withdrawing group and electron-donative group, and copolymer and proton-conductive membrane comprising same

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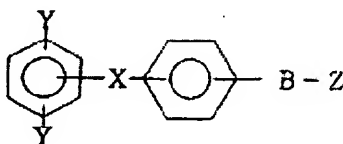
Cited documents:

 US5403675
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Abstract of EP1245554

A monomer containing an electron-withdrawing group and an electron-donative group which can be easily controlled in the upper limit of the amount of a sulfonic acid, which impairs the mechanical properties of a copolymer, and can provide a sulfonated polymer that forms a proton-conductive membrane having a high proton conductivity over a wide temperature range, an excellent mechanical strength and an excellent proton conductivity and showing inhibited swelling in hot water and an aqueous solution of methanol, and a copolymer obtained from the monomer. A monomer containing an electron-withdrawing group and an electron-donative group represented by the following general formula (1): <CHEM> wherein Y represents a iodine atom, chlorine atom or bromine atom; X represents an electron-withdrawing group; B represents an electron-donative group; and Z represents an aryl group having a specific structure or a monovalent condensed ring hydrocarbon group such as naphthyl group.



(1)